

I CLAIM:

1. A method for fabricating a semiconductor device comprising at least one component having
5 photolithographic proximity-limited geometries, comprising the steps of:

10 dividing said component into a plurality of sub-geometries, wherein each of said sub-geometries contains only structural elements spaced far enough to be compatible with photomask rules; producing a separate photomask for each of said sub-geometries; and sequentially using each of said photomasks in a plurality of photoresist printing steps so that
15 said semiconductor device component is created step by step.

2. A set of photomasks to be used in the fabrication of semiconductor devices comprising at least one component having photolithographic proximity-limited geometries,
20 said set comprising:

a plurality of photomasks, each of said photomasks intended for fabricating one sub-geometry of said component; wherein each of said sub-geometries contains only structural elements spaced far enough to be compatible with photomask rules; and the sequential use of each of said photomasks in a plurality of photoresist printing steps creates said device component step by step.